Proposed Water Conservation Regulations (Env-Ws 390)

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www.des.state.nh.us/h2o_conservation.htm

Definition of Water Conservation

RSA 485.61:1-a

"Water conservation means any beneficial reduction in water losses, waste, or use."

Background
485:61 Rules for Water Conservation

I. The department shall adopt rules, pursuant to RSA 541-A, for water conservation practices for water users. These rules shall strike a reasonable balance between environmental, energy, and economic impacts and be consistent with current industry standards and practices for different types of water users.

Background
485:61 Rules for Water Conservation (continued)

II. The water conservation rules in paragraph I of this section shall apply to all new permit applicants and applications for water withdrawals subject to the provisions of RSA 485:3, RSA 485:48, RSA 485-C:21 and section 401 of the Clean Water Act.

Background
485:61 Rules for Water Conservation (continued)

III. Water conservation rules shall be consistent with applicable state or federal rules and regulations.

Applicability of RSA 485:61 – Water Conservation Rules

- Community water systems (large and small) developing new sources of water
- New sources of water for bottled and bulk water operations
- All new large groundwater withdrawals (withdrawals >57,600 gallons per day)
- New surface water withdrawals requiring a 401 WQ Certificate

  (applicability determined by law not rules)

Goals for Water Conservation Regulations

- Meet intent of law – Reduce water waste while balancing costs and benefits (economic and environmental)
- Are meaningful and effective
- Focus on fundamental conservation measures that produce quantifiable results
- Focus on structural and operational controls that can improve water use efficiency
- Are straight-forward in nature relative to administration, compliance, and enforcement

Background

- Advisory committee reviewed and commented on four drafts of the water conservation rules from June-December 2003.
- Rules were submitted to Water Council in April
- Now beginning the formal rulemaking process

Formal Rulemaking Process

1) Develop Fiscal Impact Statement
2) Conduct Formal Public Hearing on the "initial proposal"
3) DES revises rules after fully considering public comment
4) Submit rules to a legislative committee (JLCAR)
5) Conduct a public hearing before JLCAR
6) JLCAR "approves", "conditionally approves" or issues a "preliminary objection" to the rules.
7) If not approved, DES revises and resubmits the rules to JLCAR for final approval or final objection.
8) DES adopts rules (and/or) JLCAR introduces a joint resolution.

(description of the formal rulemaking process - www.gencourt.state.nh.us/rules/index.html)

Proposed Requirements for Any New Community Water Systems

- Water Use Accounting Program
  - Metering of all connections and water sources
  - Metering in accordance with AWWA Standards
  - Meter readings for connections at least every 3 months
  - Meter readings for sources at least once a month
  - Calculation of “unaccounted for water” utilizing AWWA Standards.
  - Maximum “unaccounted water standard”of 15%.
  - Development and implementation of a response plan to reduce “unaccounted for water” to less than 15%.
  - Repair any identified leaks with 60 days
  - Implementation of Educational Outreach Initiative

Proposed Requirements for Any New Community Water Systems (continued)

- Rate Structures
  - Must be based on the unit price of water
  - Must be based on the amount of water used
  - Unit price of water may not decrease with the volume of water consumed
  - Rates not based on the volume of water used are not allowed
  - Rates based on the number of fixtures installed for each service connection are not allowed

Proposed Requirements for Existing Large Community Water Systems Developing a New Source

Same requirements as new community water systems except the water system:

- Has three years to implement a metering program
- Five years to adopt a rate structure required by the rules
- One year to implement a water audit/leak detection program

Proposed Requirements for Existing Small Community Water Systems Developing a New Source (< 1000 service connections)

Two options:

Option 1: Comply with the requirements for existing large community water systems; or

Option 2: 1) In lieu of complying with the metering and accounting requirements for existing large community water system, complete system-wide leak detection and repair program every two years

2) Same requirements for pressure reduction and landscaping for existing large community water systems

3) No rate structure requirements

Proposed Requirements for Industrial, Commercial, and Institutional (ICI) Water Users

- Identify where and how much water is used
- Install meters on all water sources
- Maintain source meters in accordance with AWWA Standards
- Replace or significantly retrofit single pass cooling systems
- Minimize water discharged to waste associated with:
  - Temperature control
  - Overflows

Proposed Requirements for Industrial, Commercial, and Institutional (ICI) Water User (continued)

- New irrigation systems installed at a facility must include automatic shut-off devices and be audited by the facility every three years.
- New lawn areas (except for those associated with golf courses and agriculture) must be underlain by 6-inches of loam.
- Identify water conservation best management practices that are unique to their given industry
  - Develop a plan and schedule to implement these within 5 years
  - Implement the the plan once approved by DES

Proposed Requirements for Industrial, Commercial, and Institutional (ICI) Water User (continued)

No conservation measure previously listed for ICI water users has to be implemented if it does not pay for itself within 4 years

Economic analysis must include:

- Cost of energy to pump and transmit water
- Cost of treating pumped water
- Cost of disposing of wastewater
- Capital costs associated with developing new source of water
- All other costs or fees associated with obtaining or disposing of the water

Complying with the Water Conservation Rules

1) Submit a report to the department that demonstrates compliance with the rules with the appropriate application for a new water source.
2) Submit a copy of the report via certified mail to the municipality and regional planning commission
3) Municipality may provide comments to DES within 21 days of receipt of the report.
4) DES will conduct a site visit within 30 days of receiving the report.
5) DES will issue approval or denial within 45 days of receiving the report.

Complying with Conservation Rules
(continued)

6) Water users will complete a form once every three years verifying compliance with the rules

7) Compliance will be verified by reviewing forms, conducting site visits or during sanitary surveys of community water systems

8) Non complying water users will be given a warning and an opportunity to develop a work plan and schedule to come into compliance with the rules

9) Approval to operate a new source may be suspended if after a warning:
   a) Water user does not comply with the rules
   b) Water user provides inaccurate information

Why Practice Water Conservation?

Average potential water savings achievable from water efficiency measures:

- **Businesses: 15-50%, with 15-35% being typical**

  (Payback periods are usually between 1 and 4 years, with the typical time less than 2.5 years)

See NH Water Efficeincy Case Studies: www.des.state.nh.us/studies

- **Residential Water Use: Approximately 35% for indoor water use.**

  Source (Water Use and Conservation Handbook – www.waterplowpress.com)

Why Practice Water Conservation?

- Conserved water is already treated to prevailing standards and ready for customer use
- Energized to provide adequate pressure to reach the customer
- Avoids Environmental Impacts/Complex Regulations for Water Withdrawals
- Reduces or eliminates the need to build infrastructure to treat and transmit water
- Reduces the costs associated with purchasing chemicals to treat water
- Reduces the costs of disposing waste materials associated treatment of water
- Reduces the costs associated with purchasing energy to pump, treat and transmit water.

Contents of DES' Water Conservation Website

www.des.state.nh.us/h2o_conservation.htm

- Proposed Water Conservation Rules
- Summary of the Requirements of the Proposed Water Conservation Rules
- Four NH Water Conservation Case Studies
- 17 Water Conservation Fact Sheets
- Model Water Use Restriction Ordinance
- 2001 DES/PUC Water Conservation Legislative Report
- Links to Drought Monitor Website
- Dept of Agriculture's Irrigation Water Conservation BMP Manual